



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/012,215	10/19/2001	Katsushi Ito	100809-16314(SCEY 19.080)	5361
26304	7590	01/11/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			MAGEE, CHRISTOPHER R	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/012,215	ITO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christopher R. Magee	2653	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 27 August 2004.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/2004 has been entered.

### ***Response to Amendment***

#### ***Specification***

2. The title has been accepted and the relevant objection is withdrawn.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soga et al. (hereinafter Soga) (US 5,737,304) in view of Kiyoshi et al. (hereinafter Kiyoshi) (JP 10-208357).

- Regarding claims 1, 5, and 9, Soga shows a disk drive comprising:  
a main apparatus frame comprising (Fig. 25 and 26):

a disk tray [2] causing a disk to move between a stored position and a drawn-up position relative to the main apparatus, the disk tray comprising one surface on which the disk is placed;

a disk rotational drive mechanism [12] rotationally driving the disk;

an optical pickup mechanism [7] performing at least one of reading stored information from the disk and writing information onto the disk;

a movable member [9] supporting the disk rotational drive mechanism and the optical pickup mechanism, the movable member being rotatably supported at one end thereof relative to the frame of the main apparatus;

an elevator drive mechanism [142; 143; and M5] bringing the disk rotational drive mechanism and the optical pickup mechanism closer to or farther away from the disk, with the movable member [9] free to rise and fall ; and

a vibration-absorbing member [123] (i.e., insulator, col. 16, lines 5-10 and lines 31-33) provided to the other end of the movable member [9] (Figs. 25 and 26);

wherein when the disk is moved toward the stored position, the elevator drive mechanism [142, 143 and M5] moves the other end of the movable member [9] toward the disk tray [2], thereby causing the fixing screw [122] to come in contact with another surface of the disk tray [2].

- Regarding claims 2, 6 and 13, Soga shows the movable member has protrusion including a rising piece and an attachment piece, which extends from an end of the rising piece toward the one end of the movable member, and the vibration-absorbing member is attached to the attachment piece (Fig. 26).

- Regarding claims 3, 7 and 14, Soga shows the vibration-absorbing member [123] comprises an annular resilient member buried in the protrusion (Fig. 25).
- Regarding claims 4, 8 and 15, Soga shows vibration-absorbing member [123] comprises a resilient member, which is inserted into a hole provided in the protrusion (Fig. 25).
- Regarding claim 10, Soga shows the protrusion extends toward an end of the movable member [9] from another end thereof (Fig. 25).
- Regarding claim 11, Soga shows the protrusion is disposed substantially parallel to the disk in the stored position (Fig. 26).
- Regarding claim 12, Soga shows the movable member [9] having a sidewall on the other end thereof, the protrusion extending as one therewith from an edge of the sidewall (Figs. 25 and 26).

Nevertheless, Soga does not show when the disk is moved to the stored position; the vibration-absorbing member [123] comes into contact with another surface of the disk tray.

Kiyoshi teaches a projection [91], made from metal or synthetic resin (i.e. rubber, plastic, nylon, etc.) that protrudes on the top face of object [25] and applies pressure to disk tray [4] to reduce vibrations and abolish noise generation (Kiyoshi English translation, sections 0042-0043).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the vibration absorbing member [123] of Soga with the projection [91] that contacts the disk tray surface as taught by Kiyoshi.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to replace the vibration absorbing member of Soga with the projection that contacts the disk tray surface as taught by Kiyoshi in order to apply pressure to

the disk tray so that vibrations are reduced and noise generation is abolished (Kiyoshi English translation, sections 0042-0043).

***Response to Arguments***

4. Applicant's arguments filed 08/27/2004 have been fully considered but they are not persuasive.

The Applicant asserts on page 11:

*"Kiyoshi's projecting piece 91 is provided on a top face of inclination-cam-die object 25, which is a fixed member. Thus, unlike the vibration-absorbing member claimed by Applicants, the projecting piece 91 is not provided on a free end of a rotatably movable member, and does not come into contact with a second surface of the disk tray when the disk is moved toward the stored position by means of the elevator drive mechanism moving the other end of the movable member toward the disk tray. Applicants' claimed member provides a significant advantage over the configuration of Kiyoshi by reducing wear in and maintaining effectiveness of the vibration absorbing member."*

In response to applicant's argument that "*the projecting piece 91 is not provided on a free end of a rotatably movable member, and does not come into contact with a second surface of the disk tray when the disk is moved toward the stored position by means of the elevator drive mechanism moving the other end of the movable member toward the disk tray*", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Kiyoshi teaches a projection [91], made from metal or synthetic resin (i.e. rubber, plastic, nylon, etc.) that protrudes on the top face of

Art Unit: 2653

object [25] and applies pressure to disk tray [4] to reduce vibrations and abolish noise generation (Kiyoshi English translation, sections 0042-0043).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the vibration absorbing member [123] of Soga with the projection [91] that contacts the disk tray surface as taught by Kiyoshi.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to replace the vibration absorbing member of Soga with the projection that contacts the disk tray surface as taught by Kiyoshi in order to apply pressure to the disk tray so that vibrations are reduced and noise generation is abolished (Kiyoshi English translation, sections 0042-0043).

Additionally, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant has argued "*Kiyoshi's projecting piece 91 is not provided on a free end of a rotatably movable member, and does not come into contact with a second surface of the disk tray when the disk is moved toward the stored position by means of the elevator drive mechanism moving the other end of the movable member toward the disk tray*". However, Soga discloses a movable member [9] supporting the disk rotational drive mechanism and the optical pickup mechanism, the movable member being rotatably supported at one end thereof relative to the frame of the main apparatus; an elevator drive mechanism [142; 143; and M5] bringing the disk rotational drive mechanism

Art Unit: 2653

and the optical pickup mechanism closer to or farther away from the disk, with the movable member [9] free to rise and fall; and

a vibration-absorbing member [123] (i.e., insulator, col. 16, lines 5-10 and lines 31-33) provided to the other end of the movable member [9] (Figs. 25 and 26); wherein when the disk is moved toward the stored position, the elevator drive mechanism [142, 143 and M5] moves the other end of the movable member [9] toward the disk tray [2], thereby causing the fixing screw [122] to come in contact with another surface of the disk tray [2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the vibration absorbing member [123] of Soga with the projection [91] that contacts the disk tray surface as taught by Kiyoshi.

Therefore, the rejection of claims 1, 5 and 9 is maintained.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (703) 605-4256. The examiner can normally be reached on M-F, 8: 00 am-5: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 7, 2005



Christopher R. Magee  
Patent Examiner  
Art Unit 2653



GEORGE J. LETSCHER  
PRIMARY EXAMINER